

Date: Thu, 5 May 94 04:30:15 PDT
From: Ham-Digital Mailing List and Newsgroup <ham-digital@ucsd.edu>
Errors-To: Ham-Digital-Errors@UCSD.Edu
Reply-To: Ham-Digital@UCSD.Edu
Precedence: Bulk
Subject: Ham-Digital Digest V94 #138
To: Ham-Digital

Ham-Digital Digest Thu, 5 May 94 Volume 94 : Issue 138

Today's Topics:

[Need clue] Internet via packet radio?
help with KaGold software...!!
HF PBBS where and who?
Integrate HF w/WAN
KAM/KPC4-to-ICW2A Connection - HELP!
Mini-Pack
packet software for unix?

Standard C5718DA mod to allow 431.75 transmit, needed for 9600bps packet
TNC-RNET Interfacing

Send Replies or notes for publication to: <Ham-Digital@UCSD.Edu>
Send subscription requests to: <Ham-Digital-REQUEST@UCSD.Edu>
Problems you can't solve otherwise to brian@ucsd.edu.

Archives of past issues of the Ham-Digital Digest are available
(by FTP only) from UCSD.Edu in directory "mailarchives/ham-digital".

We trust that readers are intelligent enough to realize that all text
herein consists of personal comments and does not represent the official
policies or positions of any party. Your mileage may vary. So there.

Date: 4 May 1994 15:41:53 GMT
From: ihnp4.ucsd.edu!ucsnews!sol.ctr.columbia.edu!howland.reston.ans.net!
darwin.sura.net!aurora.LaTech.edu!ramos@network.ucsd.edu
Subject: [Need clue] Internet via packet radio?
To: ham-digital@ucsd.edu

I have a Linux machine which I would like to connect to the Internet
via packet radio. If you have any information on this or know which
newsgroup would be more appropriate, please let me know.

Thanks!

--

Alex Ramos (ramos@engr.latech.edu) * This message is copyrighted material!
Louisiana Tech University BSEE/Sr * All rights reserved. No warranty, etc

<http://info.latech.edu/~ramos/>

Date: 3 May 94 17:11:32 EDT
From: ihnp4.ucsd.edu!library.ucla.edu!europa.eng.gtefsd.com!darwin.sura.net!
wvnmms!marshall.wvnet.edu!desaid@network.ucsd.edu
Subject: help with KaGold software...!!
To: ham-digital@ucsd.edu

HI Everyone:

I am new to packet radio and I was wondering, is KaGold software available
in public domain so that I can download it from some ftp site.

Please let me know either by email or post it to this net.

Thanks a lot.

73,
Dinakar kb8phz
kb8phz@ka4ros.ky.usa.noam

Date: Sat, 30 Apr 94 23:06:00 -0400
From: ihnp4.ucsd.edu!usc!cs.utexas.edu!convex!darwin.sura.net!
hearst.acc.Virginia.EDU!pplace!ed.lang@network.ucsd.edu
Subject: HF PBBS where and who?
To: ham-digital@ucsd.edu

I am looking for a PBBS running F6FBB software and on that I can work on
HF from Central Virginia. If you can suggest a frequency and call, or
if you run a PBBS, please let me know!

PS I hold an Advanced ticket.

≥ SLMR 2.1a ≥ KC4YLX DX-CLUSTER, Troy Va (145.09) ed.lang@pplace.com

Date: Tue, 03 May 94 19:33:18 EDT
From: ihnp4.ucsd.edu!swrinda!cs.utexas.edu!howland.reston.ans.net!
usenet.ins.cwru.edu!ns.mcs.kent.edu!kira.cc.uakron.edu!malgudi.oar.net!hypnos!

voxbox!jgrubs@network.ucsd.edu
Subject: Integrate HF w/WAN
To: ham-digital@ucsd.edu

mtimpn@baileys-emh2.army.mil (Kevin der Kinderen) writes:

> In article <7c5PLc6w165w@voxbox.norden1.com>, jgrubs@voxbox.norden1.com (Jim
> >
> >Correct me if I'm wrong, but isn't HF illegal under ITU
> >Conventions for intranational land mobile use?
>
> Don't know, is it? This could be a problem! I'll talk with our frequency
> coordinator and see what he can tell me. Would it be in an FCC reg, the
> Communications Acts of 19xx, or some other reference?

We were told in USAF MARS in 1981 to discontinue operating HF
mobile on MARS (i.e., Air Training Command) frequencies because
of some unidentified section in the final report of the ITU
WARC-79.

```
/-----\
| Jim Grubs, W8GRT          Voxbox Enterprises   Tel.: 419/882-2697 |
| jgrubs@voxbox.norden1.com 6817 Maplewood Ave.   |
| Fido: 1:234/1.0          Sylvania, Ohio 43560   |
\-----/
\+-----/
```

Date: Mon, 2 May 1994 22:34:10 GMT
From: ihnp4.ucsd.edu!swrinde!elroy.jpl.nasa.gov!ncar!asuvax!pitstop.mcd.mot.com!
mcdphx!schbbs!mothost!mdisea!uw-coco!nwnexus!jhgrud!eskimo!
rdonnell@network.ucsd.edu
Subject: KAM/KPC4-to-ICW2A Connection - HELP!
To: ham-digital@ucsd.edu

John Rumball (rumbalj@govonca.gov.on.ca) wrote:
: Hello.

: Thank you for reading this posting.

: I need help in getting a KAM (or KPC4) connected to my Icom W2A
: dual-band handheld.

: I have a cable already made up that allows me to transmit but I am having
: tremendous difficulty finding a configuration that will allow me to receive.
: The problem only exists when I try to use the KAM-W2A combo on 2m. The
: system seems to work OK on 440 because the PTT line goes to jack SP1, while

: the audio is taken from jack SP2. (This is not possible on 2m, though.)

: Although specific instructions are desired, any general advice is also
: welcomed. Please respond by internet e-mail to RUMBALJ@GOV.ON.CA.

To use 2M on a W2A you need a 'stereo' mini-phone plug. The third
connection is the receive audio. If you give Icom customer service a call,
they can FAX you a diagram. Also, if you desire to operate both bands (one
at a time, of course) you could extend the receive audio line out the back
of the TX connector, and put an in-line mini phone jack in the wire. Then
you can either 1) plug directly into the radio for 440, or 2) un-plug from
the radio and plug into the in-line jack for 144.

: Thanks, in advance, for your help.

: John Rumball, VA3BUS

: --
: : : John E. Rumball
: : ... :... :... Sudbury, ON
: :... :... : : : rumbalj@gov.on.ca
: ===== va3bus@ve3wnm.#ne.on.ca.noam

Sure thing John! 73

Bob Donnell, KD7NM bob@kd7nm.ampr.org rdonnell@eskimo.com

Date: Wed, 4 May 1994 12:00:06 GMT
From: ihnp4.ucsd.edu!sdd.hp.com!col.hp.com!news.dtc.hp.com!hplextra!hplb!
hpwin055.uksr!hpqmoea!murdo@network.ucsd.edu
Subject: Mini-Pack
To: ham-digital@ucsd.edu

I recently bought a BayComm Mini-Pack (the 25 way D connector version
with 5 pin radio lead),but I'm having trouble connecting it to my HT
(a Kenwood TH-21E).I've heard that the Mini-pack needs a mod when used
with Kenwood HT's,but I don't have the details.

Does anyone know about this mod,or any other info that might help?

Cheers,
Murdo GM7JFE

Date: Fri, 29 Apr 1994 15:57:40 GMT
From: ihnp4.ucsd.edu!usc!cs.utexas.edu!csc.ti.com!tilde.csc.ti.com!m2.dseg.ti.com!
ernest!egsner!wb9rxw!kf5iw!rwsys!rowdy!qatrix!kenb@network.ucsd.edu
Subject: packet software for unix?
To: ham-digital@ucsd.edu

there's a lot of sophisticated interface software for dos/windows, i.e.
packet-gold, the aea windows software, etc., that provide an enhancement
over the standard tnc command set.

is there anything similar floating around for unix or unix/X? i know i
can fork an xterm to talk directly to the tnc but i'm looking for something
with a bit more utility.

thanks!

ken brookner, n5lpi
kenb@qatrix.lonestar.org
kenb@cscns.com

Date: 5 May 94 07:36:50 GMT
From: news-mail-gateway@ucsd.edu
Subject: Standard C5718DA mod to allow 431.75 transmit, needed for 9600bps packet
To: ham-digital@ucsd.edu

Hi. Does anyone have a Standard C5718DA (VHF/UHF mobile 9600bps packet
ready) radio? I just hooked mine up to my TNC, and I found out that the
radio won't transmit below 438.00 MHz. Does anyone know what I can do
to allow transmit at 431.75 MHz? I would also just like to know if there
are other people out there with this radio. I was considering the Yaesu
FT-5100, but I like how the Standard C5718DA is 9600bps G3RUH packet
ready without modifications. I now found out that Yaesu will modify the
5100 for 9600bps packet for its customers, but anyway the C5718DA seems
like a great radio.

I also posted this query to tcp-group -- I probably should have posted
it to this ham-digital group only. Well anyway, thanks for any info.

Gary

Date: 5 May 1994 07:35:24 GMT
From: ece1mac26.ucsd.edu!user@network.ucsd.edu
Subject: TNC-RNET Interfacing

To: ham-digital@ucsd.edu

HI....

I am working on the Microship (the aquatic successor to BEHEMOTH, the computer-laden recumbent bicycle, mobile hamshack, etc...) and have been away from packet-hacking long enough that re-entry to the field is quite dizzying. Amazing progress, and I feel like a beginner again! <sigh>

The immediate project is to establish a business-band (itinerant frequency) data link between my backpack and the ship, not only for file transfers but also to allow a clone of the boat's GUI software to run on the laptop, linked via RF to the on-board control network of multitasking FORTH 68HC11s on a multidrop network. I have chosen the Motorola RNET 9600-baud transceivers for this, and have the units on hand.

The task now, which *should* be trivial, is to interface these with the modem-disconnect ports on a couple of TNC's. To avoid wheel-reinvention, I thought I'd first query this forum for comments or experiences with this process. I have a couple of PacComm units (Micropower-2 and Handi-Packet) and an MFJ-1278; I have not yet chosen the TNCs that will be integrated into the ship. At the moment, I'm working with a team of 18 UCSD engineering students, and we want to get the system working at the breadboard level.

Thanks for any thoughts and suggestions! Email response is best; I'll follow-up post anything that appears to be of general interest.

73!

Steven K. Roberts

N4RVE

Nomadic Research Labs

wordy@ucsd.edu

Date: 4 May 1994 15:26:44 GMT
From: ihnp4.ucsd.edu!usc!howland.reston.ans.net!torn!hermes.acs.ryerson.ca!
ee.ryerson.ca!jeff@network.ucsd.edu
To: ham-digital@ucsd.edu

References <2pjl1\$7l5@crn1.unl.edu>, <2q6e92\$kbk@hermes.acs.ryerson.ca>,
<1994May4.100155.15200@dxcern.cern.ch>ff
Subject : Re: PacketRadio forLinux with Baycom ??

Pawel Jalocho (jalocho@dxcern.cern.ch) wrote:

: In <2q6e92\$kbk@hermes.acs.ryerson.ca> jeff@ee.ryerson.ca (Donald Jeff Dionne)
writes:

: >Unfortunately, Linux will never be able to support Baycomm. The Baycomm
: >modem requires that the processor be 100% devoted to the modem while
: >packets are coming in and out, and that's just not possible under
: >a multitasking OS. Even if you could do it, it's really not desireable,
: >it would bring the whole machine to a halt!

: Not 100% true :-) For receiving packets the processor only reacts
: to modem output transitions and it is done via an interrupt.
: The key point is that the CPU has to measure the time when the interrupt
: occurred with a precision better than the time taken by a single bit
: (3.3 ms for 300 bps, 0.833 ms for 1200 bps). A precision of about
: 0.1 ms is good enough for 1200 bps.
: The trouble comes if the processor runs with interrupts disabled
: for the time which is longer than the precision needed...
: I can not say whether the LINUX system does so.

: The approach I described above is applied in the BAYCOM program
: and the AX.25 driver for the NOS written by me. The TFPCX driver
: takes a different approach by speeding up the system timer
: and sampling the modem's output at three times the bit rate
: frequency.

: Bottom line: if the LINUX operating system doesn't "blind" the CPU
: to interrupts for longer than about 0.1 ms one could (in principle)
: write a driver for the BAYCOM modem running at 1200 bps.

There is no way to tell exactly how long the kernel will disable interrupts
for, it depends on what is happening... and since ANYTHING could be, one
has to assume that there probably will not be that kind of accuracy. Having
said that, however, there is a driver for Linux that does audio over the
pc speaker using a timer and some sort of PWM, and it works unless the
machine is busy with disk I/O or the like..... If you don't mind packet
loss when the machine is busy, and the machine coming to a halt when
packet is going on (as it does with the pc speaker), then perhaps I'm
wrong and it's worth a try.

: Pawel, SP9VRC
Jeff@EE.Ryerson.Ca

Date: 4 May 94 14:28:40 GMT
From: dog.ee.lbl.gov!agate!howland.reston.ans.net!vixen.cso.uiuc.edu!
prairienet.org!k9cw@ucbvax.berkeley.edu
To: ham-digital@ucsd.edu

References <rogjdCp4zKu.J8K@netcom.com>, <rogjdCp4GF9.xJ@netcom.com>,
<pineappCp4yAo.5Ft@netcom.com>prairie
Reply-To : k9cw@prairienet.org (Andrew B. White)
Subject : Re: GTOR for PK232

In a previous article, rogjd@netcom.com (Roger Buffington) says:

>Not hard to see why. GTOR, if it is all it is cracked up to be, should
>pretty much consign CLOVER to the ash can.
>--

I don't know that I would be that quick to discount Clover. GTOR is still
an FSK mode running at 100, 200, or 300 bps. Packet has shown that 300 bps
on HF can be tough, although it does not include the error correction
capability of GTOR.

As explained at Dayton, GTOR sends the interleaved data frame with CRC first,
then the parity frame if the data frame is corrupted. There are three ways
to recover the original data: 1-decode the data frame, 2-decode the parity
frame, or 3-combine data and parity to correct up to 3 bits out of every 24.
In the best case, GTOR has a 230 bps basic data rate.

Clover, on the other hand, is a phase shift mode with longer signal element
times. It will do better in fading or noisy conditions. But when the path
is good (as 15 meters was a year ago) Clover will run flat out with a base
rate of 750 bps or about 60 bytes per second.

73, Drew

--

```
*-----*
|  Andrew B. White  K9CW  |  internet: k9cw@prairienet.org  |
|  ABW Associates, Ltd.  |  phone/fax: 217-643-7327  |
*-----*
```

End of Ham-Digital Digest V94 #138
